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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,827	02/12/2002	Edward C. McKinney JR.	SHPR-01041USQ SRM/SDS	8062
23910	7590	03/25/2004	EXAMINER	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/074,827	Applicant(s) MCKINNEY ET AL.	
	Examiner Thao T. Tran	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-22,30-35 and 37-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-22,30-35 and 37-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/8/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to the Amendments received on January 8, 2004. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.
2. Claims 1, 4-22, 30-35, 37-49 are currently pending in this application. Claims 2-3, 23-29, and 36 have been canceled. Claims 39-49 have been newly added.

Claim Objections

3. Claim 35 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 35 is dependent on claim 23, which has been canceled.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-10, 14-17, 20-21, 31-35, and 37-38, 40-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US Pat. 4,789,801).

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Lee teaches an air conditioner (loud speaker), comprising a housing; a voltage generator; a first array of electrodes 74; a second array of electrodes 72 located downstream and in staggered relation to the first array; wherein the second electrodes are evenly spaced apart from each other (see Figs. 4-6; col. 6, ln. 43-56). The first electrodes are ion emitters and curved wires; the second electrodes are ion collectors and curved rods.

Lee further teaches the second electrodes to be of equal size (see Fig. 3-6) and that the second electrodes include a nose that is closer to the first electrodes; wherein the substantially flat surface of each second electrode extends downstream from the first array (see Fig. 3).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-7, 11-13, 18-19, 22, 30 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claims 8, 14, 15, and 21 above.

Lee is as set forth in claims 8, 14, 15, and 21 above, and incorporated herein.

In regards to claim 1, Lee teaches all the second electrodes being at equal distance from the first array (see Fig. 4-6). Although Lee does not teach the inner second electrodes being positioned at a greater distance downstream from the first array than the outermost second electrodes, it would have been obvious to one of ordinary skill in the art, at the time the invention

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was made, that the distance of the second electrodes to the first would have been an art-recognized variable determined by routine experimentation.

In regards to claims 4-5, 30, and 39, the arguments are as presented in claims 9-10, 31, 40 above.

In regards to claims 6-7, 11-12, 18-19, 22, Lee further teaches an array of electrodes interposed between the second electrodes (see Fig. 3). Lee does not teach the additional electrodes to be upstream of the first electrodes or downstream of the second electrodes. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the position of these additional electrodes would have been an obvious matter of design choice, since Applicants have not disclosed the advantages of a particular position of the additional electrodes over other positions.

In regards to claim 13, Lee does not specify the distance between the second electrodes from the outlet. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the distance of the second electrodes to the outlet would have been an art-recognized variable determined by routine experimentation.

Response to Arguments

8. Applicant's arguments filed January 8, 2004 have been fully considered but they are not persuasive.

Throughout the Remarks, Applicants contend that Lee does not teach the inner second electrodes being at a greater distance downstream from the first array than the outermost second electrodes. This contention is correct. However, as pointed out in paragraph 7 above, a slight

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rearrangement of the second electrodes with respect to each other would not have significant patentable weight. With respect to the arguments that Lee does not teach the second electrodes being electrically connected to one another, Applicants are referred to Fig. 3-6 where the reference does illustrate that the second electrodes are electrically connected to one another.

Hence, Lee does teach the presently claimed invention.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

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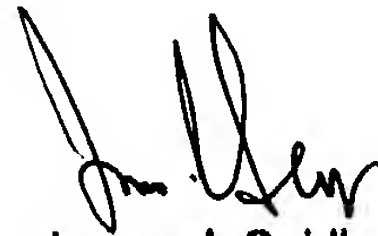
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thao Tran

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March 19, 2004



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700